Abstract

A method and apparatus provide efficient synchronization recovery at the receiver end for a digital transmission system. At the receiving end, a digital signal is received including a transmitted data portion and a guard period. A signal envelope for the received digital signal is determined, and the signal envelope is filtered to find the center of the guard period, which provides a time reference for the received digital signal. Embodiments of the present invention described herein may be used for optimal operation of a digital transmission system by efficiently recovering synchronization from a received digital signal during noisy conditions without being dependent on signal shape or requiring complicated threshold calculations.